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Figure 1

<u>Polynucleotide sequence of Human BMP2A gene</u> (gi: 179501 and 4557368) (SEQ ID NO:1) (Coding sequence: 324 – 1514)

	1	ggggacttct	tgaacttgca	gggagaataa	cttgcgcacc	ccactttaca	ccggtgcctt
	ρŢ	tgccccagcg	gagcctgctt	cgccatctcc	gageceace	gccctccac	tecteggeet
	121	tgcccgacac	tgagacgctg	ttcccagcgt	gaaaagagag	actococoo	COOCACCCOO
	TRT	gagaaggagg	aggcaaagaa	aaqqaacqqa	catteggtee	ttacaccaaa	teetttaaca
10	241	agagttttc	catgtggacg	ctctttcaat	ggacgtgtcc	ccacatactt	cttagacgga
	301	ctgcggtctc	ctaaaggtcg	accatggtgg	ccaaaaccca	ctgtcttcta	acattactac
	201	ttccccaggt	cctcctgggc	ggcqcqqctq	acctcattcc	ggagetggge	cacaaaaat
	421	tcgcggcggc	gtcgtcgggc	cgcccctcat	cccagccctc	tgacgaggtc	ctaaacaaat
	401	legagttgeg	gctgctcagc	atgttcggcc	tqaaacaqaq	acceaecece	agcagggacg
15	34 L	ccgtggtgcc	cccctacatg	ctagacctgt	atcocaooca	ctcaggtcag	ccaaactcac
	90T	ccgccccaga	ccaccggttg	gagagggcag	ccagccgagc	caacactgtg	cacaacttcc
	991	accatgaaga	atctttggaa	gaactaccag	aaacgagtgg	gaaaacaacc	cagagattet
	/21	tetttaattt	aagttctatc	cccacqqaqq	agtttatcac	ctcagcagag	cttcadattt
	/8T	tccgagaaca	gatgcaagat	gctttaggaa	acaatagcag	tttccatcac	cdaattaata
20	84 T	tttatgaaat	cataaaacct	gcaacagcca	actcgaaatt	ccccataacc	agacttttgg
	901	acaccaggtt	ggtgaatcag	aatgcaagca	ggtgggaaag	ttttgatgtc	acccccacta
	901	tgatgcggtg	gactgcacag	ggacacgcca	accatogatt	cataataaaa	ataaccaact
	1021	rggaggagaa	acaaggtgtc	tccaagagac	atottaogat	aagcaggtet	ttacaccaaa
0.5	TOST	atgaacacag	ctggtcacag	ataaggccat	toctaotaac	ttttggccat	natonaaaa
25	T T 4 T	ggcatcctct	ccacaaaaga	gaaaaacgtc	aagccaaaca	Caaacagcgg	aaacccctta
	1201	agtccagctg	taagagacac	cctttqtacq	togacttcag	taacataaaa	tagaataaat
	1707	ggattgtggc	tcccccgggg	tatcacqcct	tttactgcca	cadadaatac	ccttttcctc
	T25T	rggcrgatca	tctgaactcc	actaatcato	ccattottca	gacgttggtc	aactctctt
20	1387	actctaagat	tcctaaggca	tgctgtgtcc	cgacagaact	cagtgctatc	tccatactat
30	1441	accttgacga	gaatgaaaag	gttgtattaa	agaactatca	ggacatggtt	gtggagggtt
	1501	gtgggtgtcg	ctagtacagc	aaaattaaat	acataaatat	atatata	

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Figure 2

<u>Polypeptide sequence of human BMP2A</u> (SEQ ID NO:2 = translation of SEQ ID NO:1)

5	1	MVAGTRCLLA	LLLPQVLLGG	AAGLVPELGR	RKFAAASSGR
	41	PSSQPSDEVL	SEFELRLLSM	FGLKQRPTPS	RDAVVPPYML
	81	DLYRRHSGQP	GSPAPDHRLE	RAASRANTVR	SFHHEESLEE
	121	LPETSGKTTR	RFFFNLSSIP	TEEFITSAEL	QVFREQMQDA
	161	LGNNSSFHHR	INIYEIIKPA	TANSKFPVTR	LLDTRLVNQN
10	201	ASRWESFDVT	PAVMRWTAQG	HANHGFVVEV	AHLEEKQGVS
	241	KRHVRISRSL	HQDEHSWSQI	RPLLVTFGHD	GKGHPLHKRE
	281	KRQAKHKQRK	RLKSSCKRHP	LYVDFSDVGW	NDWIVAPPGY
	321	HAFYCHGECP	FPLADHLNST	NHAIVQTLVN	SVNSKIPKAC
	361	CVPTELSAIS	MLYLDENEKV	VLKNYQDMVV	EGCGCR

Figure 3
Results of a loss of function validation experiment

